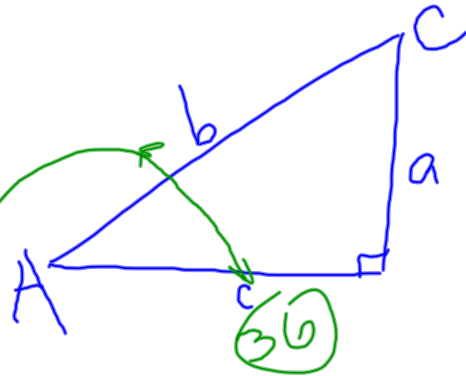


6.2/1



find side c.

$$\frac{c}{b} = \frac{\text{adj}}{\text{hyp}}$$

$$\cos A = \frac{12}{13}$$

$$b = 39$$

$$\frac{c}{39} = \frac{12}{13}$$

$$13c = 12 \cdot 39$$

$$c = \frac{12 \cdot 39}{13}$$

$$= 12 \cdot \left(\frac{39}{13}\right)$$

$$\textcircled{36} = 12 \cdot 3$$

6.2/13

$$a = 4$$

$$m\angle A = 60^\circ$$

find c [hypotenuse]



what trig ratio includes
the side you know AND
the side you want.

$$\tan 60^\circ = \frac{4}{c}$$

$$60^\circ: a=4 \text{ [opp]}$$

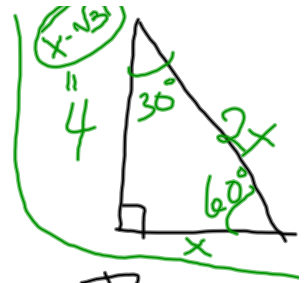
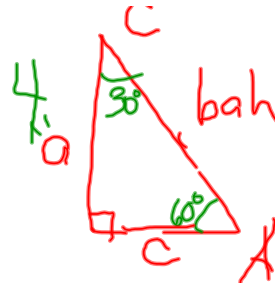
~~hypotenuse~~
~~[opposite]~~
 $c = ?$ [adjacent]

$$\frac{\frac{\sqrt{3}}{2}}{\frac{1}{2}} = \frac{4}{c}$$

$$\sqrt{3} = \frac{4}{c}$$

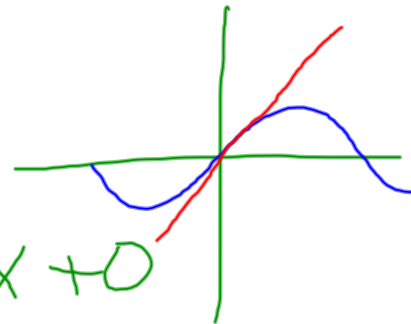
$$4 = \sqrt{3}c$$

$$\frac{4\sqrt{3}}{3} = \frac{4}{\sqrt{3}} = c$$



- * Set calculators in degree mode
- * Graph $y=\sin(x)$
- * 2nd+DRAW ... Tangent @ $x=0, y=0$
- * Equation appears at bottom
- * Record slope

$$Y = .017453 X + 0$$

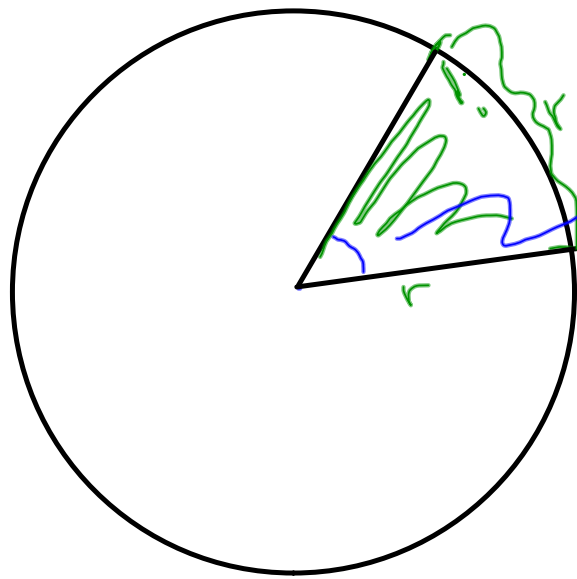


- ** NOW ... set calculators to radian mode
- * Graph $y=\sin(x)$
- * 2nd+DRAW ... Tangent @ $x=0, y=0$
- * Equation appears at bottom
- * Record slope

$$y = .9999998 x + c$$

Zoom TRIG

π
~~TAU~~



$$C = \frac{2\pi r}{r} = 2\pi$$

1
radius
angle
radian

$$\frac{360^\circ}{2\pi} = 1 \text{ radians}$$

	radians	degrees
$x \text{ radians} =$	2π	$= 360$
$\left(\frac{x}{2\pi}\right) 360^\circ$	π	180
	$\frac{1}{2}\pi = \frac{\pi}{2}$	$= 90$
	$\frac{\pi}{4}$	$= 45$
	$\frac{\pi}{6}$	$= 30$

$\pi \text{ radians} = 180^\circ$

$y \text{ degrees} \xrightarrow{\pi/3} \frac{1}{2}\pi = \frac{\pi}{2} \xrightarrow{60^\circ}$

$= \left(\frac{y}{360}\right) 2\pi$

radians to degrees

$$x \text{ radians} = \left(\frac{x}{2\pi}\right)(360) = \frac{x}{\pi}(180)$$

degrees to radians

$$y \text{ deg} = \left(\frac{y}{360}\right) 2\pi = \frac{y \cdot \pi}{180}$$

